

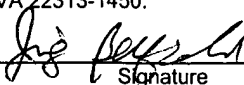


CASE PH 7496 NP

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Jing S. Belfield, Ph.D.
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Signature

November 11, 2003
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

DEERBERG ET AL.

APPLICATION NO: 10/660,345

FILED: SEPTEMBER 11, 2003

FOR: ASYMMETRIC CATALYTIC HYDROGENATION PROCESS FOR
PREPARATION OF CHIRAL CYCLIC B-AMINOESTERS

MAIL STOP: D.D.
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This paper is being filed within three months of the filing date of the application. Therefore, no fees are required. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 19-3880.

In accordance with 37 C.F.R. §1.56, applicants wish to call the Examiner's attention to the references cited on the attached form(s) PTO-1449.

Copies of these references are enclosed herewith.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form(s).

Respectfully submitted,


Jing S. Belfield
Agent for Applicants
Reg. No. 45,914

Bristol-Myers Squibb Company
Patent Department
P.O. Box 4000
Princeton, NJ 08543-4000
(609) 252-3791

Date: November 11, 2003

FORM PTO-1449
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
PH 7496 NP
APPLICATION NO.
10/660,345
APPLICANT
DEERBERG ET AL.
FILING DATE
SEPTEMBER 11, 2003

Group



INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

AI	Melillo, D. G.; Cvetovich, R. J.; Ryan, K. M.; Sletzing, M., "An Enantioselective Approach to (+)-Thienamycin from Dimethyl 1,3-Acetonedicarboxylate and (+)- α -Methylbenzylamine", J. Org. Chem. 1986, 51, pp. 1498-1504.
AJ	Haviari, G; Célérier, J. P.; Lhommet, G.; Gardette, D.; Gramain, J. C.; "Asymmetric Synthesis with Chiral Hydrogenolysable Amines. Cyclic β -Enamino Ester Reduction A Diastereoselective Route to 2,3-Disubstituted Pyrrolidines", Tetrahedron Lett., Vol. 33, pp. 4311-4312, 1992.
AK	Haviari, G; Célérier, J. P.; Petit, H.; Lhommet, G.; "Asymmetric Synthesis with Chiral Hydrogenolysable Amines. A Short Synthesis of (-) Isoretronecanol", Tetrahedron Lett., Vol. 34., No. 10, pp. 1599-1600, 1993.
AL	Agami, C.; Kadouri-Puchot, C.; Le Guen, V.; Vaissermann, J., "Neuromediator Analogs: Synthesis of <i>cis</i> (2R,3S) and <i>trans</i> (2S,3S)-2,3-Piperidine Dicarboxylic Acids from (2S)-2-Phenylglycinol", Tetrahedron Lett., Vol. 36, No. 10, pp. 1657-1660, 1995.
AM	Cimarelli, C.; Palmieri, G.; "Stereoselective Reduction of Anantiopure β -Anamino Esters by Hydride: A Convenient Synthesis of Both Enantiopure β -Amino Esters", J. Org. Chem. 1996, 61, pp. 5557-5563.
AN	Hayashi, Y.; Rhode, J.J.; Corey, E.J.; "A Novel Chiral Super-Lewis Acidic Catalyst for Anantioselective Synthesis", J. Am. Chem. Soc. 1996, 118, pp. 5502-5503.
AO	Agami, C.; Hamon, L.; Kadouri-Puchot, C.; Le Guen, V.; "Enantioselective Synthesis of Conformationally Restricted Analogs of NMDA: <i>cis</i> - and <i>trans</i> -Piperidine-2,3-dicarboxylic Acids and Methylated Derivatives", J. Org. Chem. 1996, 61, pp. 5736-5742.
AP	Segat, F.; Lingibé, O.; Graffe, B.; Sacquet, M.C.; Lhommet, G.; "Asymmetric Synthesis with Chiral Hydrogenolysable Amines: A New Route to Enantiomerically Pure Amino Diols", Heterocycles, Vol. 45, No. 8, pp. 1451-1455.
AQ	Blot, J.; Bardou, A.; Bellec, C.; Fargeau-Bellassoued, M. C.; Célérier, J. P.; Lhommet, G.; Gardette, D.; Gramain, J. C.; "Chiral Cyclic β -Amino Esters. Part II: Synthesis by Diastereoselective Reduction of Anamino Esters", Tetrahedron Lett., Vol. 38, No. 49, pp. 8511-8514, 1997.
AR	Daley, V.; d'Angelo, J.; Cave, C.; Mahuteau, J.; Chiaroni, A.; Riche, C.; "A Novel Asymmetric Synthesis of 2,5-Dialkylpyrrolidines", Tetrahedron Letter, Vol. 40, pp. 1657-1660, 1999.
AS	David, O et al., "Enamino Ester Reduction: A Short Enantioselective Route to Pyrrolizidine and Indolizidine Alkaloids. Synthesis of (+)-Laburnine, (+)-Tashiromine, and (-)-Isoretronecanol", J. Org. Chem. 1999, 64, 3122-3131.
AT	Zhong, H. M.; Cohen, J. H.; Abdel-Magid, A. F.; Kenney, B. D.; Maryanoff, C. A.; Shah, R. D.; Villani, F. J., Jr.; Zhang, F.; Zhang, X.; "An efficient stereoselective synthesis of methyl (S)-3-amino-3-(3-pyridyl)propanoate", Tetrahedron Lett. 1999, 40, 7721-7725.
AU	Mechelke, M. F.; Meyers, A. I.; "An efficient, asymmetric synthesis of (+)-euphoccoccine", Tetrahedron Lett. 2000, 41, 4339-4342.
AV	David, O.; Bellec, C.; Fargeau-Bellassoued; Lhommet, G.; "Diastereoselective reduction of chiral enamino lactones: A short and convenient route to anantiopure (+)-tashiromine", Heterocycles, Vol. 55, No. 9, 1689-1701, 2001.

EXAMINER

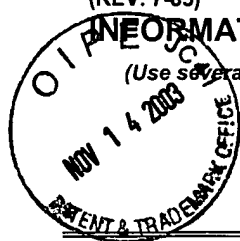
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PATENT AND TRADEMARK OFFICE**

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		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
1	AA	EP 062 840	3/31/82	EP			<input type="checkbox"/>	<input type="checkbox"/>
1	AB	EP 250 179	6/12/87	EP			<input type="checkbox"/>	<input type="checkbox"/>
1	AC	WO 00/43383	7/27/00	PCT			<input type="checkbox"/>	<input type="checkbox"/>
1	AD	WO 01/07433	2/1/01	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AE	WO 01/70673	9/27/01	PCT			<input type="checkbox"/>	<input type="checkbox"/>

AF	Cimarelli, C.; Palmieri, G.; Bartoli, G.; "Diastereo and Enantioselective Entry to β -Amino Esters by Hydride Reduction of Homochiral β -Enamino Esters", <i>Tetrahedron: Asymmetry</i> , Vol. 5, No. 8, pp.1455-1458, 1994.
AG	Xu, D.; Prasad, K.; Repič, O.; Blacklock, T. J.; "A practical synthesis of anantiopure ethyl <i>cis</i> -2-amino-1-cyclohexanecarboxylate via asymmetric reductive amination methodology", <i>Tetrahedron: Asymmetry</i> , Vol. 8, No.9, pp. 1445-1451, 1997.
AH	Melillo, D. G.; Shinkai, I.; Liu, T., "A practical synthesis of (\pm)-Thienamycin", <i>Tetrahedron Lett.</i> , Vol. 21, 1980, pp. 2783-2786.

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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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AF	Cimarelli, C.; Palmieri, G.; Bartoli, G.; "Diastereo and Enantioselective Entry to β -Amino Esters by Hydride Reduction of Homochiral β -Enamino Esters", <i>Tetrahedron: Asymmetry</i> , Vol. 5, No. 8, pp.1455-1458, 1994.
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FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

AY	Wang, G. T., et al; "Design, Synthesis, and Structural Analysis of Influenza Neuraminidase Inhibitors Containing Pyrrolidine Cores", J. Med. Chem. 2001, 44, 1192-1201
AS	
AT	

EXAMINER

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